# Rufin VANRULLEN

### Peer-reviewed Articles since 2016

- 1. Choksi, B., Mozafari, M., VanRullen, R., & Reddy, L. (2022). Multimodal neural networks better explain multivoxel patterns in the hippocampus. *Neural Networks*. doi: 10.1016/j.neunet.2022.07.033
- 2. Ozcelik, F., Choksi, B., Mozafari, M., Reddy, L., & VanRullen, R. (2022). Reconstruction of perceived images from fMRI patterns and semantic brain exploration using Instance-Conditioned GANs. *Int. Joint Conf. Neural Networks (IJCNN)*.
- 3. VanRullen, R. (2022). Deep learning in alternate reality. *Nature Human Behaviour*, 6(1), 27-28.
- 4. Vaishnav, M., Cadene, R., Alamia, A., Linsley, D., VanRullen, R., & Serre, T. (2022). Understanding the computational demands underlying visual reasoning. *Neural Computation*, 34 (5), 1075-1099
- 5. Merholz, G., Grabot, L., VanRullen, R., & Dugué, L. (2022). Periodic attention operates faster during more complex visual search. *Scientific Reports*, 12(1), 1-14.
- Bielawski, R., Devillers, B., Van de Cruys, T., & VanRullen, R. (2022). When does CLIP generalize better than unimodal models? When judging human-centric concepts. ACL 2022: 7th workshop on *Representation Learning for NLP* (Rep4NLP 2022). 29-38
- Decourt, C., VanRullen, R., Salle, D., & Oberlin, T. (2022). DAROD: a deep automotive radar object detector on range-doppler maps. Proceedings of the 33rd IEEE Intelligent Vehicles Symposium (IV 2022), 112-118.
- 8. Fakche, C., VanRullen, R., Marque, P., & Dugué, L. (2022). Alpha Phase-Amplitude Tradeoffs Predict Visual Perception. *eNeuro*, 9(1).
- Luo, C., Chen, W., VanRullen, R., Zhang, Y., & Gaspar, C. M. (2022). Nudging the N170 forward with prior stimulation— Bridging the gap between N170 and recognition potential. *Human brain mapping*, 43(4), 1214-1230.
- Choksi, B., Mozafari, M., Biggs O'May, C., Ador, B., Alamia, A., & VanRullen, R. (2021). Predify: Augmenting deep neural networks with brain-inspired predictive coding dynamics. *NeurIPS 2021: Advances in Neural Information Processing Systems*, 34.
- 11. Pang, Z., Biggs O'May, C., Choksi, B. & VanRullen, R. (2021). Predictive coding feedback results in perceived illusory contours in a recurrent neural network. *Neural Networks*. doi: 10.1016/j.neunet.2021.08.024.
- 12. VanRullen, R., & Kanai, R. (2021). Deep learning and the Global Workspace Theory. Trends in Neurosciences. 44(9), 692-704
- 13. VanRullen, R., & Alamia, A. (2021). GAttANet: Global attention agreement for convolutional neural networks. Lecture Notes in Computer Science: Artificial Neural Networks and Machine Learning, 12891, 1-11.
- 14. Choksi, B., Mozafari, M., VanRullen, R., & Reddy, L. (2021). Multimodal neural networks better explain multivoxel patterns in the hippocampus. In Neural Information Processing Systems (NeurIPS) conference: 3rd Workshop on Shared Visual Representations in Human and Machine Intelligence (SVRHM 2021).
- 15. Reddy, L., Self, M.W., Zoefel, B., Poncet, M., Possel, J.K., Peters, J.C., Baayen, J.C., Idema, S., VanRullen, R. and Roelfsema, P.R., (2021). Theta-phase dependent neuronal coding during sequence learning in human single neurons. *Nature Communications*, 12(1), 1-9.
- 16. Devillers, B., Choksi, B., Bielawski, R., & VanRullen, R. (2021). Does language help generalization in vision models? CoNLL2021: Proceedings of the 25th Conference on Computational Natural Language Learning, 171-182.
- 17. Reddy, L., Cichy, R. M., & VanRullen, R. (2021). Representational content of oscillatory brain activity during object recognition: contrasting cortical and deep neural network hierarchies. *eNeuro*, 8(3).
- 18. Chalvidal, M., Ricci, M., VanRullen, R., & Serre, T. (2021). Go with the flow: Adaptive control for Neural ODEs. *ICLR 2021: International Conference on Learning Representations*.
- 19. Luo, C., Brüers, S., Berry, I., VanRullen, R., & Reddy, L. (2021). Tentative fMRI signatures of perceptual echoes in early visual cortex. *NeuroImage*, 237, 118053.
- Luo, C., VanRullen, R., & Alamia, A. (2021). Conscious perception and perceptual echoes: a binocular rivalry study. Neuroscience of Consciousness, 2021(1), niab007.
- 21. Chota, S., Marque, P., & VanRullen, R. (2021). Occipital Alpha-TMS causally modulates Temporal Order Judgements: Evidence for discrete temporal windows in vision. *NeuroImage*, 237, 118173.
- 22. Alamia, A., Luo, C., Ricci, M., Kim, J., Serre, T., & VanRullen, R. (2020). Differential involvement of EEG oscillatory components in sameness vs. spatial-relation visual reasoning tasks. *eNeuro*
- 23. Alamia, A., Timmermann, C., Nutt, D. J., VanRullen, R.\*, & Carhart-Harris, R. L.\* (2020). DMT alters cortical travelling waves. *eLife* 9, e64623.
- 24. **Pang, Z., Alamia, A., & VanRullen, R. (2020).** Turning the Stimulus On and Off Changes the Direction of α Traveling Waves. *eNeuro* 7(6).
- 25. Alamia, A., Gauducheau, V., Paisios, D., & VanRullen, R. (2020). Comparing feedforward and recurrent neural network architectures with human behavior in artificial grammar learning. *Scientific Reports* 10(1), 1-15.
- 26. Schwenk, J. C., VanRullen, R., & Bremmer, F. (2020). Dynamics of visual perceptual echoes following short-term visual deprivation. *Cerebral Cortex Communications*.
- Mozafari, M., Reddy, L., & VanRullen, R. (2020). Reconstructing Natural Scenes from fMRI Patterns using BigBiGAN. Int. Joint Conf. Neural Networks (IJCNN).
- 28. Chota, S., McLelland, D., Lavergne, L., Zimmermann, E., Cavanagh, P., & VanRullen, R. (2020). Full Field Masking Causes Reversals in Perceived Event Order. *Front. Neurosci.*, 14, 217.
- 29. Gaillard, C., Hassen, S. B. H., Di Bello, F., Bihan-Poudec, Y., VanRullen, R., & Hamed, S. B. (2020). Prefrontal attentional saccades explore space rhythmically. *Nature Comm*, 11(1), 1-13.
- 30. Alamia, A., & VanRullen, R. (2019). Alpha oscillations and traveling waves: Signatures of predictive coding? *PLoS Biol.*, 17(10).
- 31. VanRullen, R., Reddy, L. (2019). Reconstructing faces from fMRI patterns using deep generative neural networks *Communications Biology* 2(1), 193.

- 32. **Gulbinaite**, **R.**, **Roozendaal**, **D. H. M.**, & **VanRullen**, **R.** (2019). Attention differentially modulates the amplitude of resonance frequencies in the visual cortex. *Neuroimage*, 203(116146).
- 33. Alamia, A., VanRullen, R., Paqualato, E., Mouraux, A., Zenon, A. (2019). Pupil-linked arousal responds to unconscious surprisal. *J Neurosci*, 39(27), 5369-5376.
- 34. **Dugué, L., Beck, A., Marque, P. & VanRullen, R. (2019).** Contribution of FEF to attentional periodicity during visual search: a TMS study. *eNeuro*, 6(3).
- 35. Chota, S. & VanRullen, R. (2019). Visual entrainment at 10 Hz causes periodic modulation of the flash lag illusion. *Front. Neurosci.* 13(232).
- 36. Lozano-Soldevilla, D. & VanRullen, R. (2019). The hidden spatial dimension of alpha: 10 Hz perceptual echoes propagate as periodic travelling waves in the human brain. *Cell Reports*, 26(2), 374-380.
- Alamia, A., Zenon, A., VanRullen, R., Duque, J. & Derosiere, G. (2018). Implicit visual cues tune oscillatory motor activity during decision-making. *Neuroimage*, 186, 424-436.
- 38. Chota, S., Luo, C., Crouzet, S.M., Boyer, L., Kienitz, R., Schmid, M.C. & VanRullen, R. (2018). Rhythmic fluctuations of saccadic reaction time arising from visual competition. *Scientific Reports* 8(1), 15889
- 39. VanRullen, R. (2018). Attention cycles. Neuron, 99(4), 632-634.
- 40. Bruers, S. & VanRullen, R. (2018). Alpha Power Modulates Perception Independently of Endogenous Factors. *Front. Neurosci.* 12:279.
- 41. Baures, R., Balestra, M., Rosito, M. & VanRullen, R. (2018). The detrimental influence of attention on time-to-contact perception. Att. Percept. Psychophys. 80(6), 1591-1598.
- 42. **Benedetto, A., Lozano-Soldevilla, D. & VanRullen, R. (2018).** Different responses of spontaneous and stimulus-related alpha activity to ambient luminance changes. *Eur J Neurosci*, 48(7), 2599-2608.
- 43. Edwards, G., VanRullen, R. & Cavanagh, P. (2018). Decoding trans-saccadic memory. J Neurosci 38(5), 1114-1123.
- 44. **Gulbinaite, R., van Viegen, T., Wieling, M., Cohen. M.X. & VanRullen, R. (2017).** Individual alpha peak frequency predicts 10 Hz flicker effects on selective attention. *J Neurosci*, 37(42) 10173-10184
- 45. **Gulbinaite**, **R.**, **Ilhan**, **B. & VanRullen**, **R.** (2017). The triple-flash illusion reveals a driving role of alpha-band reverberations in visual perception. *J Neurosci* 37(30), 7219-7230.
- Chang, A., Schwartzman, D.J., VanRullen, R., Kanai, R. & Seth, A.K. (2017). Visual perceptual echo reflects learning of regularities in rapid luminance sequences. *J Neurosci* 37(35), 8486-8497.
- 47. Brüers, S. & VanRullen, R. (2017). At what latency does the phase of brain oscillations influence perception? *eNeuro* 4(3):e0078-17.2017.
- 48. **Dugué**, L. & VanRullen, R. (2017). Transcranial Magnetic Stimulation reveals intrinsic perceptual and attentional rhythms. *Front. Neurosci.* 11:154.
- Zoefel, B. & VanRullen, R. (2017). Oscillatory mechanisms of stimulus processing and selection in the visual and auditory systems: State-of-the-art, speculations and suggestions. Front. Neurosci. 11:296.
- 50. Edwards, G., Paeye, C., Marque, P., VanRullen, R. & Cavanagh, P. (2017). Predictive position computations mediated by parietal areas: TMS evidence. *Neuroimage* 153, 49-57
- 51. VanRullen, R. (2017). Perception Science in the age of Deep Neural Networks. Front. Psychology 8:142.
- 52. **Zoefel, B., Costa-Faidella, J., Lakatos, P., Schroeder, C.E. & VanRullen, R. (2017).** Characterization of neural entrainment to speech with and without slow spectral energy fluctuations in laminar recordings in monkey A1. *NeuroImage* 150, 344-357.
- 53. Han, B. & VanRullen, R. (2017). The rhythms of predictive coding? Pre-stimulus phase modulates the influence of shape perception on luminance judgments. *Scientific Reports* 7, 43573.
- 54. VanRullen, R. (2016). Perceptual cycles. *Trends Cogn Sci* 20(10), 723-735.
- McLelland, D. & VanRullen, R. (2016). Theta-Gamma Coding Meets Communication-through-Coherence: Neuronal Oscillatory Multiplexing Theories Reconciled. *PLoS Comput Biol* 12(10), e1005162
- 56. Sun, H-M., Inyutina, M., VanRullen, R. & Wu, C-T. (2016). The temporal advantage for reloading vs. uploading conscious representations decays over time. *Neurosci Consc* 216(1), niw017.
- 57. VanRullen, R. (2016). How to evaluate phase differences between trial groups in ongoing electrophysiological signals. *Front. Neurosci* 10:426.
- 58. **Sherman, M. T., Kanai, R., Seth, A. K., & VanRullen, R. (2016).** Rhythmic influence of top-down perceptual priors in the phase of pre-stimulus occipital alpha oscillations. *J Cogn Neurosci*, 28(9), 1318-1330.
- McLelland, D., Lavergne, L. & VanRullen, R. (2016). The phase of ongoing EEG oscillations predicts the amplitude of perisaccadic mislocalization. Scientific Reports 6, 29335.
- Sokoliuk, R. & VanRullen, R. (2016). Global and local oscillatory entrainment of visual behavior across retinotopic space. Scientific Reports 6, 25132.
- 61. **Han, B. & VanRullen, R. (2016).** Shape perception enhances perceived contrast: evidence for excitatory predictive feedback? *Scientific Reports* 6, 22944.
- 62. **Miconi, T. & VanRullen, R. (2016)**. A Feedback Model of Attention Explains the Diverse Effects of Attention on Neural Firing Rates and Receptive Field Structure. *PLoS Comput Biol* 12(2): e1004770.
- 63. Senoussi, M., Berry, I., VanRullen, R. & Reddy, L. (2016). Multivoxel Object Representations in Adult Human Visual Cortex Are Flexible: An Associative Learning Study, *J Cogn Neurosci* 28(6), 852-868.
- 64. **Zoefel, B. & VanRullen, R. (2016).** EEG oscillations entrain their phase to high-level features of speech sound. *Neuroimage*, 124, 16-13.

# **Book Chapters since 2016**

- Sokoliuk, R. & VanRullen, R. (2019). Perceptual illusions caused by discrete sampling. In "The illusions of Time: Philosophical and Psychological Essays on Timing and Time Perception", Eds: A. Bardon, V. Arstila, S. Power & A. Vatakis. Palgrave Macmillan, pp. 315-338.
- VanRullen, R. (2018). Perceptual Rhythms, in "Stevens Handbook of Experimental Psychology and Cognitive Neuroscience, Vol 2: Sensation, Perception and Attention" Ed: J. Serences. Wiley, doi:10.1002/9781119170174.epcn212.

#### **Invited Oral Presentations in International Conferences since 2016**

- 1. VanRullen, R. (2022). Deep predictive coding for more robust and human-like vision, Invited presentation, IS 2022: SIAM conference on Imaging Science (online).
- 2. VanRullen, R. (2021). Do deep learning latent spaces resemble human brain representations? NeuroCog 2021 (Louvain, Belgium).
- 3. VanRullen, R. (2021). Deep predictive coding for more robust and human-like vision, Invited presentation, SMB 2021: Annual meeting of the Society for Mathematical Biology (online).
- 4. VanRullen, R. (2019). Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Asia-Pacific Conference on Vision (Osaka, Japan).
- 5. VanRullen, R. (2019). Perceptual Cycles, Waves and Predictive Coding, Invited presentation, York University VISTA Centre for Vision Research International Conference on Predictive Vision, Toronto (Canada).
- 6. VanRullen, R. (2019). Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Dynamics of Vision and Touch (DyViTo), Rauischholzhausen (Germany).
- 7. VanRullen, R. (2018). Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Alpha Scales workshop, European Institute of Theoretical Neuroscience, Paris (France).
- 8. VanRullen, R. (2018). Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Symposium on New trends in decision-making: decision as inference? Paris (France).
- 9. VanRullen, R. (2017). Perceptual Cycles and Waves, Invited presentation, Timing Research Forum, Strasbourg (France).
- 10. VanRullen, R. (2017). Perceptual Cycles, Invited keynote presentation, Association for the Scientific Study of Consciousness meeting, Beijing, (China).
- 11. VanRullen, R. (2017). Perceptual Cycles in Vision and Audition, Invited presentation, Neural Oscillations in Speech and Language Processing Symposium, Berlin (Germany).

#### **Conference Proceedings since 2016:**

- Alamia, A., Mozafari, M., Choksi, B. & VanRullen, R. (2022). On the role of feedback in visual processing: a predictive coding perspective. Cognitive Computational Neuroscience (CCN 2022), San Francisco (USA).
- Choksi, B., VanRullen, R. & Reddy, L. (2022). Do multimodal neural networks better explain human visual representations than vision-only networks? CCN Cognitive Computational Neuroscience (CCN 2022), San Francisco (USA).
- 3. Muzellec, S., Chalvidal, M., Serre, T. & VanRullen, R. (2022). Accurate implementation of computational neuroscience models through neural ODEs. Cognitive Computational Neuroscience (CCN 2022), San Francisco (USA).
- 4. Ozcelik, F., Choksi, B., Mozafari, M., Reddy, L., & VanRullen, R. (2022). Reconstruction of perceived images from fMRI patterns and semantic brain exploration using Instance-Conditioned GANs. International Joint Conference on Neural Networks (IJCNN).
- 5. **Bielawski, R., Devillers, B., Van de Cruys, T., & VanRullen, R. (2022).** When does CLIP generalize better than unimodal models? When judging human-centric concepts. ACL 2022: 5th workshop on Representation Learning for NLP (Rep4NLP 2022)
- Decourt, C., VanRullen, R., Salle, D., & Oberlin, T. (2022). DAROD: a deep automotive radar object detector on range-doppler maps. Proceedings of the 33rd IEEE Intelligent Vehicles Symposium (IV 2022).
- 7. VanRullen, R. (2022). Deep predictive coding for more robust and human-like vision, Invited presentation, IS 2022: SIAM conference on Imaging Science (online).
- 8. VanRullen, R. (2021). Do deep learning latent spaces resemble human brain representations? NeuroCog 2021 (Louvain, Belgium).
- 9. VanRullen, R. (2021). Deep predictive coding for more robust and human-like vision, Invited presentation, SMB 2021: Annual meeting of the Society for Mathematical Biology (online).
- 10. **Devillers, B., Choksi, B., Bielawski, R., & VanRullen, R. (2021).** Does language help generalization in vision models? CoNLL2021: Proceedings of the 25th Conference on Computational Natural Language Learning, 171-182.
- 11. VanRullen, R., & Alamia, A. (2021). GAttANet: Global attention agreement for convolutional neural networks. ICANN 2021: International Conference on Artificial Neural Networks.
- 12. Choksi, B., Mozafari, M., Biggs O'May, C., Ador, B., Alamia, A., & VanRullen, R. (2021). Predify: Augmenting deep neural networks with brain-inspired predictive coding dynamics. NeurIPS 2021: Advances in Neural Information Processing Systems, 34.
- Devillers, B., Choksi, B., Bielawski, R., & VanRullen, R. (2021). Does language help generalization in vision models? ViGIL workshop, NAACL 2021.
- 14. Choksi, B., Mozafari, M., VanRullen, R., & Reddy, L. (2021). Multimodal neural networks better explain multivoxel patterns in the hippocampus. In Neural Information Processing Systems (NeurIPS) conference: 3rd Workshop on Shared Visual Representations in Human and Machine Intelligence (SVRHM 2021).
- 15. Fakche, C., VanRullen, R., Marque, P. & Dugué, L. (2021). Causal link between the phase and amplitude of spontaneous alpha oscillations, cortical excitability and visual perception. European Conference on Visual Perception (online).
- 16. Chalvidal, M., Ricci, M., VanRullen, R., & Serre, T. (2021). Go with the flow: Adaptive control for Neural ODEs. ICLR 2021: International Conference on Learning Representations.
- 17. Choksi, B., Mozafari, M., Biggs O'May, C., Ador, B., Alamia, A. & VanRullen, R. (2020). Brain-inspired predictive coding dynamics improve the robustness of deep neural networks. NeurIPS 2020 Workshop SVRHM
- 18. Pang, Z., Choksi, B., Biggs O'May, C. & VanRullen, R. (2020). Predictive coding results in perceived illusory contours in a recurrent neural network. NeurIPS 2020 Workshop SVRHM
- 19. VanRullen, R. & Reddy, L. (2020). Brain decoding with GANs. WCNP: Winter Conference on Neural Plasticity
- 20. Mozafari, M., Reddy, L., & VanRullen, R. (2020). Reconstructing Natural Scenes from fMRI Patterns using BigBiGAN. Int. Joint Conf. Neural Networks (IJCNN)
- 21. Alamia, A., Gauducheau, V., Paisios, D. & VanRullen, R. (2019). Which neural network architecture matches human behavior in artificial grammar learning? Annual Conference on Cognitive Computational Neuroscience (CCN), Berlin (Germany).
- 22. Schwenk, J., Zavitz, E., VanRullen, R., Price, N. S. & Bremmer, F. (2019). Neural correlates of perceptual echoes in marmoset primary visual cortex. Society for Neuroscience meeting (Chicago, USA).
- 23. VanRullen, R. (2019). Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Asia-Pacific Conference on Vision (Osaka, Japan).
- 24. VanRullen, R. (2019). Perceptual Cycles, Waves and Predictive Coding, Invited presentation, York University VISTA Centre for Vision Research International Conference on Predictive Vision, Toronto (Canada).
- 25. VanRullen, R. (2019). Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Dynamics of Vision and Touch (DyViTo), Rauischholzhausen (Germany).
- Luo, C., Brüers, S., Berry, I., VanRullen, R. & Reddy, L. (2019). fMRI signatures of perceptual echoes in early visual cortex. Vision Sciences Society Annual Meeting, St Pete Beach (USA)

- 27. Merholz, G., VanRullen, R. & Dugué, L. (2019). Oscillations modulate attentional search performance periodically. Vision Sciences Society Annual Meeting, St Pete Beach (USA)
- 28. VanRullen, R. (2018). Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Alpha Scales workshop, European Institute of Theoretical Neuroscience, Paris (France).
- Schwenk, J., VanRullen, R. & Bremmer, F. (2018). The effects of short-term monocular deprivation on visual perceptual echoes. Society for Neuroscience meeting (San Diego, USA).
- 30. VanRullen, R. & Reddy, L. (2018). Reconstructing faces from fMRI patterns using Generative Adversarial Networks. Annual Conference on Cognitive Computational Neuroscience (CCN), Philadelphia (USA).
- 31. Alamia, A. & VanRullen, R. (2018). Predictive Coding Produces Alpha-band Rhythmic Travelling Waves. Annual Conference on Cognitive Computational Neuroscience (CCN), Philadelphia (USA).
- 32. VanRullen, R. (2018). Perceptual Cycles, Waves and Predictive Coding, Invited presentation, Symposium on New trends in decision-making: decision as inference? Paris (France).
- 33. VanRullen, R. (2017). Perceptual Cycles and Waves, Invited presentation, Timing Research Forum, Strasbourg (France).
- 34. Reddy, L., Cichy, R. & VanRullen, R. (2017). Using DNNs as a yardstick for estimating the representational value of oscillatory brain signals. Annual Conference on Cognitive Computational Neuroscience (CCN), New York (USA).
- 35. VanRullen, R. (2017). Predictive coding and neural communication delays produce alpha-band oscillatory Impulse Response Functions. Annual Conference on Cognitive Computational Neuroscience (CCN), New York (USA).
- 36. **Reddy, L., Cichy, R. & VanRullen, R. (2017).** Oscillatory signatures of object recognition across cortical space and time. 40<sup>th</sup> European Conference on Visual Perception (ECVP), Berlin (Germany).
- Brüers, S. & VanRullen, R. (2017). Does alpha power modulate perception independently of endogenous factors? 13th International Conference for Cognitive Neuroscience (ICON), Amsterdam (Netherlands).
- 38. **Reddy, L., Cichy, R. & VanRullen, R. (2017).** Oscillatory signatures of object recognition across cortical space and time. Proceedings of the 17th Vision Sciences Society annual meeting, St Pete (Florida, USA).
- 39. Brüers, S. & VanRullen, R. (2017). At what latency does the phase of brain oscillations influence perception? Proceedings of the 17th Vision Sciences Society annual meeting, St Pete (Florida, USA).
- 40. **Gulbinaite, R., Roozendaal, D. & VanRullen, R. (2017).** Attention effects on steady-state visual evoked potentials in response to 3-80 Hz flicker. Proceedings of the 17th Vision Sciences Society annual meeting, St Pete (Florida, USA).
- 41. Edwards, G., VanRullen, R. & Cavanagh, P. (2017). EEG decoding of pre-saccadic effects on post-saccadic processing. Proceedings of the 17th Vision Sciences Society annual meeting, St Pete (Florida, USA).
- 42. **Benedetto, A., Lozano-Soldevilla, D. & VanRullen, R. (2017).** Ambient luminance changes modulate oscillatory properties of the visual system. Proceedings of the 17th Vision Sciences Society annual meeting, St Pete (Florida, USA).
- 43. Chemla, S., Chavane, F. & VanRullen, R. (2016). Revealing alpha oscillatory activity using voltage-sensitive dye imaging in monkey V1. European Conference on Visual Perception (Barcelona, Spain).
- 44. Edwards, G., Marque, P., VanRullen, R. & Cavanagh, P. (2016). Predictive position percepts mediated by parietal areas: TMS evidence. Proceedings of the 16th Vision Sciences Society annual meeting, St Pete (Florida, USA).
- 45. Gulbinaite, R., Ilhan, B. & VanRullen, R. (2016). Something out of nothing: The role of alpha-frequency reverberation in the triple-flash illusion. Proceedings of the 16th Vision Sciences Society annual meeting, St Pete (Florida, USA).
- 46. Lozano-Soldevilla, D. & VanRullen, R. (2016). The hidden spatial dimension of alpha: occipital EEG channels encode contralateral and ipsilateral visual space at distinct phases of the alpha cycle. Proceedings of the 16th Vision Sciences Society annual meeting, St Pete (Florida, USA)
- Crouzet, S. & VanRullen, R. (2016). The half-time groove of divided attention: differences in EEG and decoding power spectra when attending to one vs. two items. Proceedings of the 16th Vision Sciences Society annual meeting, St Pete (Florida, USA).
- 48. Bruers, S. & VanRullen, R. (2016). Visual target detection in temporal white-noise: A "universal" forward model using oscillatory impulse response functions. Proceedings of the 16th Vision Sciences Society annual meeting, St Pete (Florida, USA).